

AMENDMENTS TO THE CLAIMS

1-10. (Canceled)

11 (New): A hollow fiber fluid separation module comprising:
an inlet for an inlet feed flow, an outlet for an exit flow;
an access port for a permeate flow, a discharge port for the permeate flow,
a module axis and a plurality of hollow fibers;
each of the fibers extending from the inlet to the outlet and comprising an interior
communicating with the inlet at one end of each hollow fiber and with the outlet at the other end
of each hollow fiber, with the hollow fibers being wound in multiple layers to form a hollow
cylindrical coil;

each layer being defined on its inner side by an imaginary cylinder and having a number
of hollow fibers helically wound on the cylinder with a helix angle α ;

the fibers being in a clearance relationship with each other and equally spaced on the
cylinder, with one layer differing from a neighbouring layer by the fact that all the fibers of the
one layer are inclined at the wind angle plus α , whereas all the fibers of the neighbouring
layer are at the wind angle minus α ; and

each fiber being wrapped 360° at least once around the associated cylinder and being laid
down during winding with a tensile strain high enough for the fiber to be frictionally held in the
best possible manner to the crosswise disposed fibers lying underneath and low enough for the
hollow fibers not to have their inner cross section noticeably restricted even though they are
deformed at the intersections and for all of the hollow fibers to be applied with the same tensile
strain.

12 (New): The hollow fiber fluid separation module as set forth in claim 11, wherein the
first, lowermost layer is located on a tube that forms the imaginary cylinder of the layer.

13 (New): The hollow fiber fluid separation module as set forth in claim 11, wherein the
access port comprises at least one axial bore that is formed in the tube.

14 (New): The hollow fiber fluid separation module as set forth in claim 11, wherein the
wind angle α ranges between 15° and 75°.

15 (New): The hollow fiber fluid separation module as set forth in claim 11, wherein the
distance a between two hollow fibers of one layer ranges between onefold and tenfold the inner
radius of the hollow fibers.

16 (New): The hollow fiber fluid separation module as set forth in claim 11, wherein all of the fibers have the same length.

17 (New): The hollow fiber fluid separation module as set forth in claim 11, wherein all of the fibers are built according to the same design principle.

18 (New): The hollow fiber fluid separation module as set forth in claim 11, wherein the tensile strain is selected such that the free inner cross section of the hollow fiber at the intersections is more than 90 %, more specifically more than 95 % and advantageously more than 98 % of the inner cross section of the hollow fiber outside of the intersections.

19 (New): The hollow fiber fluid separation module as set forth in claim 11, wherein the outermost layer of the winding is enclosed by a shell that tightly surrounds the outermost layer and comprises access or exit means for permeate flow, more specifically for circulation gas.

20 (New): The hollow fiber fluid separation module as set forth in claim 11, wherein the module is obtained from a preform by cutting the preform along the sectioning planes and that the preform comprises an axially quite long winding and has an axial length that is greater than the length of a plurality of modules.